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ADVERTISING METHOD AND DEVICE USING CHATTING

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## Specification

1. Title of the invention

Advertising Method and Device Using Chatting

2. Brief description of the figures

Figure 1 is a flow chart showing advertisements using a chatting function of the present invention.

Figure 2 explains an advertising method in a chatting window.

Figure 3 shows the constitution as a method for analyzing the contents of a sentence.

Figure 4 is a block diagram showing database and program elements required for analyzing chatting contents.

3. Detailed explanation of the invention

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(Purpose of the invention)

(Technical field of the invention and prior art of the field)

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<sup>1</sup> Numbers in the margin indicate pagination in the foreign text.

Currently, chatting as an Internet application program has only basic functions and is constituted so that users can chat with other users. However, the present invention is constituted to raise various values added by analyzing the shapes of users in chatting using messengers, etc., and to realize the conveniences for usage.

In many cases, the purpose of the chatting is to exchange information among persons who do not know each other, to promote the friendship, and to make friends with persons who do not know each other. Therefore, the following phenomena are frequently generated.

- 1) Chatting is interrupted without an appropriate subject.
- 2) In case a specific subject is discussed, the information on the contents of the corresponding subject is required to be collected.
- 3) Silence and dullness are caused during the interruption of chatting.
- 4) Other sounds must not be heard during a voice chatting.
- 5) Chatting participants have different ages, sex, occupations, environments, etc.

A chatting talker can detect the occupation, environment, character, and knowledge level of the other party by analyzing the chatting contents and the question and answer contents.

Currently, a simple chatting is carried out, and these chatting contents are not analyzed at all.

(Technical problems to be solved by the invention)

The subject of chatting between talkers is detected by analyzing the chatting contents of chatting users or detecting the title of a chatting room. The information useful for chatting of users related to the subject is provided. This information includes various items such as news, advertisement, and web search.

If necessary, as a result of this search, the age, sex, occupation, environment, etc., of participants are considered in the display.

In order to raise the efficiency of these additional information offer, they are notified on a chatting room window.

An advertisement is carried out using a blank time in which a character chatting or voice chatting is temporarily paused, and a margin blank time is utilized.

As advertising methods, a voice advertisement is put, or an advertisement is put under chatting contents in a chatting window, or an advertisement is put in the entire surface of the chatting window after scrolling up the chatting content, or an advertisement is put in the blank of the chatting contents. /3

During the interruption of chatting, an advertisement is constituted so that it may be seen and heard, thereby being able to make a profit by a chatting service provider. This advertisement is carried out in accordance with the standpoint and the needs of each user.

In case a user uses voices, a voice advertisement is immediately interrupted so that the user may not be hindered by it.

The news information suitable for the subjects or the standpoints and needs of users and other appropriate information on the Internet are provided to chatting users.

Only the letters input by users should be recorded on the chatting room window.

During the voice chatting, the main words are analyzed so that the subject/purpose of chatting can be detected.

These functions are applied to all the other fields on the Internets. In other words, they are applied to bulletin boards, news nets, mails, etc., so that chatting can be induced, even if advertisements are not wanted to be seen.

In the chatting room, letters are usually written by a simple sentence. An advertisement is put using this blank of the chatting room window.

A chatting program is realized by the present invention.

(Constitution and operation of the invention)

Definition:

The present invention is explained mainly by chatting (hereinafter, commonly called 'chatting room' or 'conversation'), however its contents are applied to all data such as letters of a bulletin board, news net, and mails.

The basic contents are explained mainly by the character chatting, however through the analysis of the chatting contents using a voice recognition in accordance with the development of a voice recognition technique, the same method as SPEECH to TEXT is also applied to the voice chatting.

Advertisement in the chatting room window on a network:

Chatting between participants in a chatting room is sometimes a gossip without a subject, however a specific subject is often discussed and consulted. However, users sometimes want to see the additional information on a specific company or specific object related to the subject of this discussion and consultation. The present invention finds out these needs, automatically search for them in a chatting room, and provide the information that is required for users or is useful for chatting.

In Figure 1, 1-1 detects whether or not the contents of the discussion and consultation of a chatting room correspond to a

specific subject. It can be detected by analyzing the title of the chatting room or the contents of the corresponding chatting. If the contents are related to a specific subject (1-2), the contents of the corresponding subject or subject word, that is, news and advertisement are searched and displayed. This display is positioned on the background screen of a computer, a separate web browser, and a separate window of a messenger, or inside chatting letters of a chatting window of the chatting room. The display of a news or advertisement (hereinafter, commonly called 'advertisement') plays a role of efficiently showing the news or advertisement to the eyes of users. If it is frequently displayed on the chatting window during chatting, it causes an obstacle to the users. In order to prevent it, 1) talkers /4 write letters on the chatting window or detect whether or not voices are used during a voice chatting. (1) If chatting is interrupted, the chatting contents are scrolled up, and an advertisement is notified on the chatting room window; or (2) an advertisement is put under the interrupted part of the chatting, and if the chatting is resumed, the advertisement is erased. Also, 2) a conversation (chatting) generally consists of a simple sentence in a shape in which 1-4 words are usually written at a time, and there is a large right blank. An advertisement is put in the blank.



In other words, an advertisement is put in a chatting room window when a character chatting is interrupted, and an advertisement is put in a voice chatting window when a voice chatting is interrupted. It is shown in 1-4 to 1-5. 1-5 shows all of an advertisement using only voices, an advertisement using the chatting window of character/graphic/dynamic image, and an advertisement in the voice and chatting windows. If the voice chatting is resumed, the voice advertisement is stopped, and if the chatting is resumed in the chatting window, the advertisement in the chatting window is stopped (1-6). The advertisement of the chatting window can be continued in the browser and other parts.

In Figure 2, 2-1 shows an advertisement after the chatting is stopped in the above-mentioned chatting window. 2-2 shows an advertisement technique that puts an advertisement in a blank by using the constitution in which several simple words are used in chatting. In addition, the chatting contents are raised by scrolling them up, and an advertisement can also be put in the entire surface of the chatting window (2-3). 2-4 shows chatting sentences, and 2-5 shows a graphic advertisement. Here, the advertisement does not necessarily mean only the graphic or animation. An advertisement in a character (TEXT) type is also included.

Analysis of the chatting contents on a network:

In consideration of the means for detecting a specific subject in 1-1 of Figure 1 and the level of chatting room participants in a target advertisement for providing news and advertisements, an appropriate target advertisement is prepared. This method is shown in Table I.

Table I

/5

	대화 표현 내용 분석 대상	대화내용의 가능 항목	타겟 이용을 위한 분류 항목
1	맞춤법(좋다)	연,학,교,인,직	연령 (정신연령)
2	간략어(많다)	연(v),인,학(v)	직업, 전공, 경력분야
3	문장의 길이(길다)	연,인,학	인터넷/채팅/컴퓨터 능숙도
4	이모콘 사용(많다)	연(v),인	학력 수준/지능
5	불필요 장난어(많다)	연(v),학(v),교(v)	교양 수준/성격
6	글의 내용	모두 해당	취미
7	의성어, 의태어	성,연	관심사
8	단어의 전문성, 난이도(높다)	직,취,학,교,관,연	성별
9	고어, 최신어, 최신인물(많다)	연, 성	거주지, 출신지
10	웹사이트 명/url, 사이트 성격	모두 해당	
11	타이핑 속도(빠르다)	인,직,상,연(v),학	
12	질문에 대한 답변의 질(좋다)	학,직,연	
13	문장 표현 방법(좋다)	학,교,직,연	
14	표현 사용 빈도	모두 해당	
15	문장/질문 표현, 논리성(높다)	학,교,직,연	
16	ID	성,연,직,간,취	

1. Analysis objects of chatting expression contents
2. Function items of chatting contents
3. Classification items for a target utilization
4. Rules of spelling (good)
5. Abbreviated words (many)
6. Length of sentence (long)
7. Use of remote control (frequent)
8. Unnecessary joke words (many)

9. Contents of sentence
10. Onomatopoeic words and mimetic words
11. Specialty of words and difficulty (high)
12. Archaic words, newest words, and newest articles (many)
13. Website name/url and site character
14. Typing speed (fast)
15. Quality of the answer for questions (good)
16. Sentence expression method (good)
17. Expression usage frequency
18. Sentence/question expression and logicality (high)
19. Age, academic background, culture, Internet, and occupation
20. Age (v), Internet, and academic background (v)
21. Age, Internet, and academic background
22. Age (v) and Internet
23. Age (v), academic background (v), and culture (v)
24. All
25. Sex and age
26. Occupation, hobby, academic background, culture, interest,  
and age
27. Age and sex
28. All
29. Internet, occupation, sex, age (v), and academic background
30. Academic background, occupation, and age

31. Academic background, culture, occupation, and age
32. All
33. Academic background, culture, occupation, and age
34. Sex, age, occupation, interest, and hobby
35. Age (mental age)
36. Occupation, specialty, and carrier field
37. Internet/chatting/computer skill
38. Academic background level/intelligence
39. Culture level/character
40. Hobby
41. Interest
42. Sex
43. Place of residence and hometown

In the above table, in the first column from the left, the chatting contents of the chatting room are analyzed by each item of the column of <analysis objects of chatting expression contents> and classified in accordance with <classification items for a target utilization>. <Classification items for a

target utilization & gt> is classified by <analysis objects of chatting expression contents> and described in the column of <function items of chatting contents>. It is assumed that <analysis objects of chatting expression contents> is based on the items described in ( ) of each item, that is, good, many, etc., and <function items of chatting contents> is expressed by (rules of spelling are good) if (for example, age) is high, unless stated otherwise. <Function items of chatting contents> is indicated by only the front letter of <classification items for a target utilization>. The case contrary to it is expressed similarly to the downward arrow of (v). It is explained in detail.

1 shows that if the rules of spelling of <analysis objects of chatting expression contents> are good, the age and the academic background level/intelligence) of <<function items of chatting contents> are high, the culture level/character is also high, and the carrier of the occupation, specialty, and carrier field is good.

The abbreviated words of 2 express laughing by <hhhhh> (abbreviation of hahaha). It is an expression method frequently appearing in a letter chatting, and if the age is low (v), the Internet experience is lot, and the academic background is low (v), these expressions are frequently used.

The contents of the sentence of 6 are analyzed, and the selection from <classification items for a target utilization> is applied to all the items.

In onomatopoeic words and mimetic words of 7, men are expressed by <hahaha>, and women are expressed <hoho>, so that the sex can be recognized.

<Occupation>, <hobby>, <academic background>, <culture>, <interest>, and <age> are divided in detail and can be discriminated by the specialty of words of 8.

In <website name/url and site character> of 10, the site of the corresponding URL is analyzed using the Web URL mentioned by users, and the users are understood by its characteristics. A target advertisement is carried out in accordance with them.

12 means that if <academic background> is high, <occupation> carrier is a lot, and <age> reaches a certain extent, <quality of the answer for questions>, that is, the answer for questions is appropriate and logical.

13 is the sentence expression method. The expression method and the words being used depend on persons, even in sentences with the same meaning.

14 is a depth of the degree of repetitive use of the /6 contents explained above. In other words, the depth of specialty, the degree of repetitive use of special terms, etc.,

are shown. In the contents of <semiconductor expert>, the degree of use of the special terms is high, and the frequency is also high.

15 shows the logicality of the expression of sentences and questions.

16 discriminates the sex by whether the ID of users is male or female, discriminates the specialty and occupation by whether or not special terms are included, and can also detect hobbies.

There are some cases where these classifications are not necessarily applied, and these cases are generated when the age is as very low as the teens or very high (example: sixties or higher). Thus, the application is required to be flexible.

Occupation, specialty, carrier field and hobby, interest, place of residence, and hometown can be divided in detail by <industry/specialty field, hobby/preference, administration region>. They are different when the other <classification items for a target utilization> compares the age, the sex of men and women, and the academic background/intelligence.

As a method for analyzing the chatting contents, the meanings/contents can be guessed only by <verb> and <noun> in an expressed sentence as shown in 3-1. The noun includes all of subject, objective, and pronoun. The noun in this sentence analysis plays a very important role. In 3-2, <pronoun> is

extracted and utilized. This pronoun shows name of product, name of person/name of company, and address. It can be added to a special sentence analysis program of 3-3 or separately operated.

Figure 4 shows the arrangement of necessary database lists and necessary means of Table I.

The necessary database lists are word list (word dictionary, chatting expression word dictionary), chatting onomatopoeic word and mimetic word expression word list, general word and special word list (by industrial fields), sentence expression method and sentence end in chatting, definition, character, and field classification list for a website, number of remote control words, archaic word and newest word list, frequency by users and words used, list of the number of words used by users and sentences, typing speed measurement list by users, and ID classification standards list of 4-1.

4-2 shows the kind of programming as a programming means for detecting chatting contents, and there are entire chatting/7 content detection program by users, logicality/relation detection program of answers to questions, logicality/relation detection program of sentences expressed by users, and ID detection program.



4-3 shows character of chatting room, that is, title of chatting room, etc., personal information of users, and voice recognition means as basic means elements in addition to 4-1 and 4-2.

In a voice chatting, the contents of chatting are analyzed using a voice recognition or speech to text function, and an advertisement is carried out by applying the standards of the above table, using the analyzed contents.

(Effects of the invention)

The messenger role as a chatting means is largely increased. An advertisement is put in the messenger, and talkers receive news or advertisements as a useful information by using a chatting blank time. This information is an important element for interestingly assisting chatting.

This information is useful through an efficient use of a chatting window or voice, compared with the prior art.

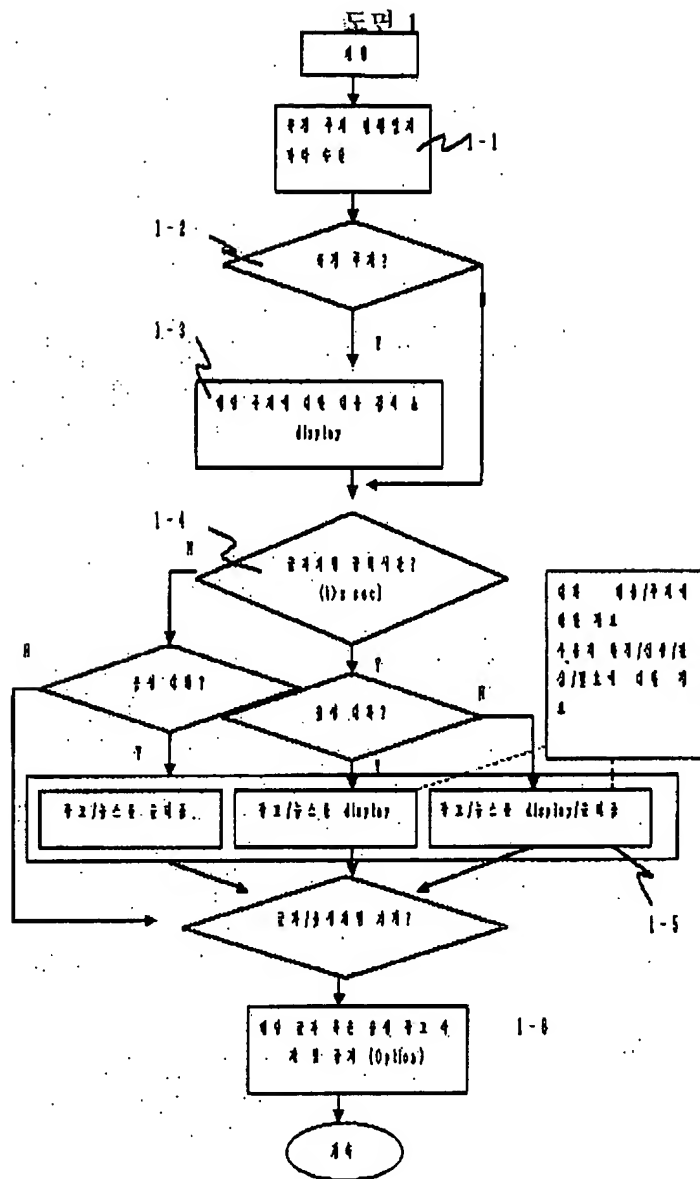
The chatting contents are analyzed by various analysis elements, which is useful for a target advertisement.

All the elements appearing in the chatting contents are included as the analysis elements. In particular, as the characters of a website being mentioned, occupation, hobby, and interest can be guessed.

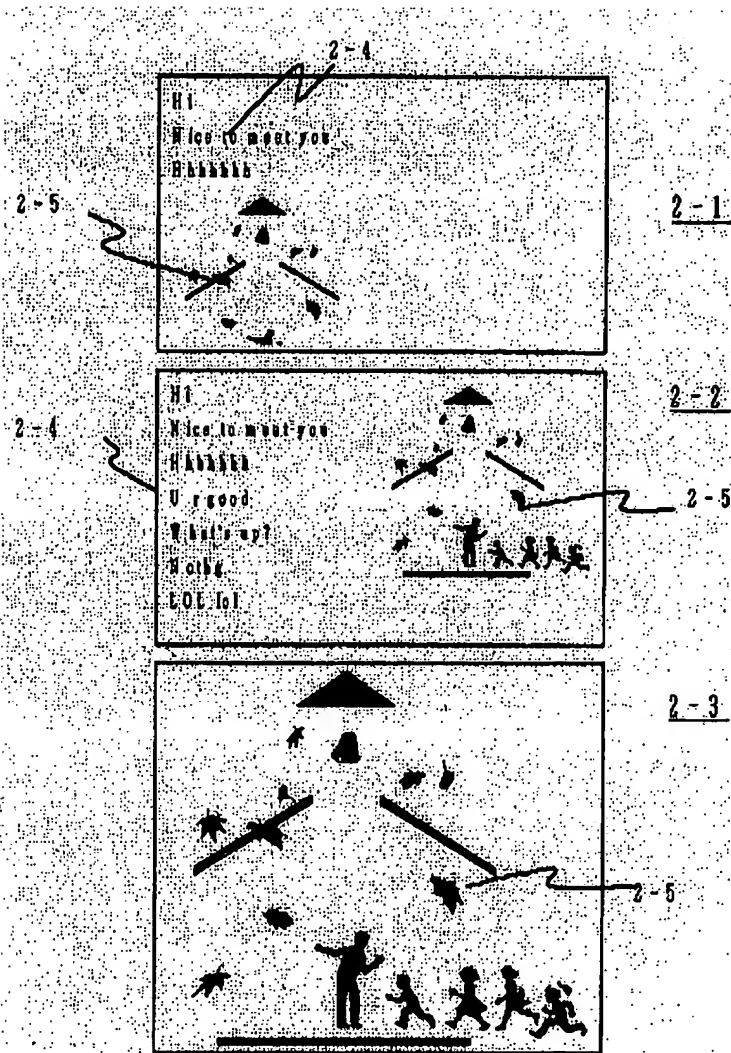
Since sentences can also be simply analyzed by verbs and nouns, they can be very simplified.

4. Claim

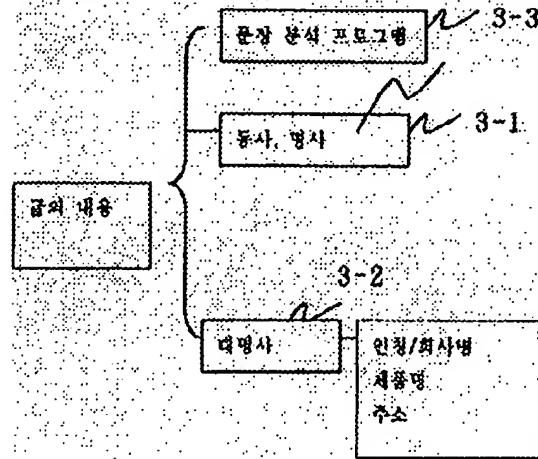
1. A method, characterized by the fact that the contents of sentences and chatting of a messenger as a chatting means on a network are analyzed; a useful information is provided to talkers in a chatting window or through a voice; and said information consists of news and advertisements.



# 도면 2



도면 3



도면 4

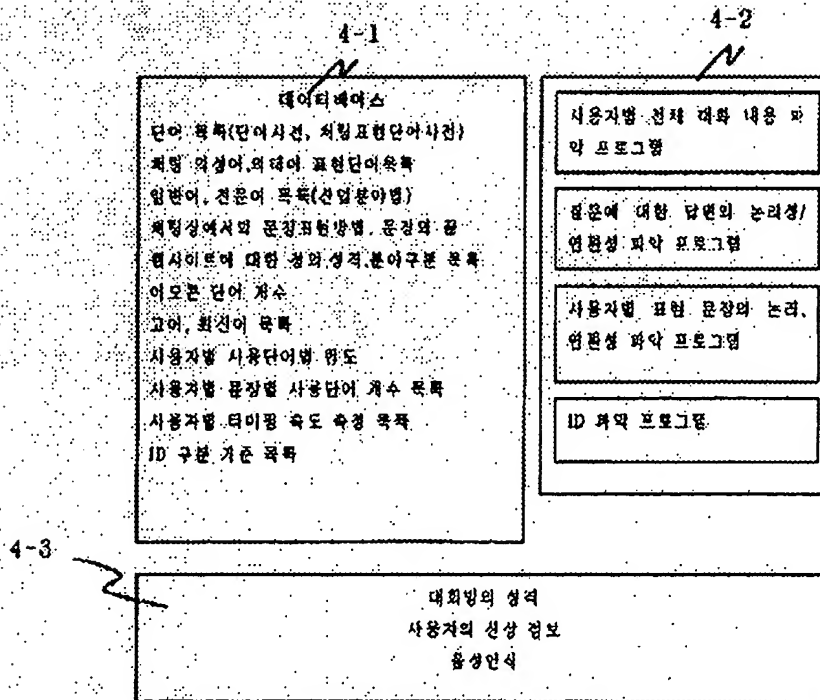


Figure 1:

- A. Technique
- B. Voice chatting?
- C. Voice chatting?
- D. [illegible] information [illegible]  
Information on [illegible] environment/personal/[illegible]
- E. Letter/voice [illegible]?
- F. Continuation
- 1-1 [illegible]
- 1-2 Additionally exist?
- 1-3 [illegible] search for the corresponding subject & display
- 1-4 Letter [illegible] time? (t)x sec)
- 1-5 Offer of advertisement/news  
Display of advertisement/news  
Display/offer of advertisement/news
- 1-6 [illegible] letter or voice advertisement and [illegible]  
(option)

Figure 3:

- A. Contents of sentences
- B. Name of person/name of company  
Name of product  
Address
- 3-1 Verb and noun

3-2 Pronoun

3-3 Sentence analysis program

Figure 4:

4-1 Database

Word list (word dictionary, chatting expression word dictionary)

Chatting onomatopoeic word and mimetic word expression word list

General word and special word list (by industrial fields)

Sentence expression method and sentence end in chatting

Definition, character, and field classification list for a website

Number of remote control words

Archaic word and newest word list

Frequency by users and words used

List of the number of words used by users and sentences

Typing speed measurement list by users

ID classification standards list

4-2 Entire chatting content detection program by users,

Logicality/relation detection program of answers to questions

Logicality/relation detection program of sentences  
expressed by users

ID detection program

4-3 Character of chatting room

Personal information of users

Voice recognition means